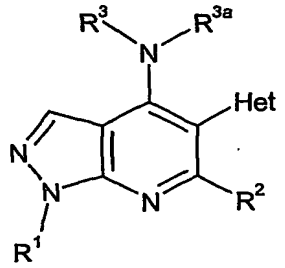
## CLAIMS

1. A compound of formula (I) or a salt thereof:



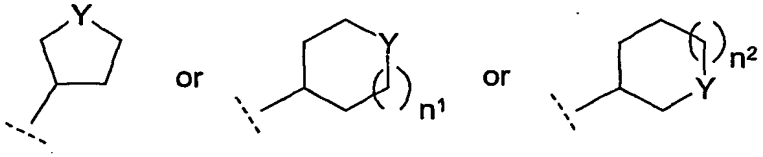
(I)

wherein:

$R^1$ is $C_{1-4}$alkyl, $C_{1-3}$fluoroalkyl or $-(CH_2)_2OH$;

$R^2$ is a hydrogen atom (H), methyl or $C_1$fluoroalkyl;

$R^3$ is optionally substituted branched $C_{3-6}$alkyl, optionally substituted $C_{3-8}$cycloalkyl, optionally substituted mono-unsaturated-$C_{5-7}$cycloalkenyl, optionally substituted phenyl, or an optionally substituted heterocyclic group of sub-formula (aa), (bb) or (cc):



(aa) (bb) (cc)

in which $n^1$ and $n^2$ independently are 1 or 2; and Y is O, S, $SO_2$, or $NR^4$; where $R^4$ is a hydrogen atom (H), $C_{1-2}$alkyl, $C_{1-2}$fluoroalkyl, $CH_2C(O)NH_2$, $C(O)NH_2$, $C(O)$-$C_{1-2}$alkyl, or $C(O)$-$C_1$fluoroalkyl;

wherein in $R^3$ the optionally substituted branched $C_{3-6}$alkyl is optionally substituted with one or two substituents being oxo (=O), OH, $C_{1-2}$alkoxy or $C_{1-2}$fluoroalkoxy; and wherein any such substituent is not substituted at the $R^3$ carbon atom attached (bonded) to the -NH- group of formula (I);

wherein in $R^3$ the phenyl is optionally substituted with one substituent being fluoro, chloro, $C_{1-2}$alkyl, $C_{1-2}$fluoroalkyl, $C_{1-2}$alkoxy, $C_{1-2}$fluoroalkoxy or cyano, or with two or three fluoro substituents;

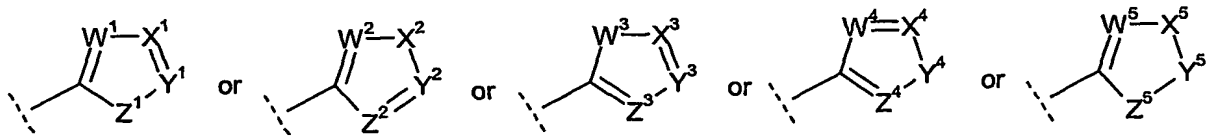
wherein in $R^3$ the $C_{3-8}$cycloalkyl or the heterocyclic group of sub-formula (aa), (bb) or (cc) is optionally substituted with one or two substituents independently being oxo (=O); OH; $C_{1-2}$alkoxy; $C_{1-2}$fluoroalkoxy; $NHR^{21}$ wherein $R^{21}$ is a hydrogen atom (H) or $C_{1-4}$ straight-chain alkyl; $C_{1-2}$alkyl; $C_{1-2}$fluoroalkyl; $-CH_2OH$; $-CH_2CH_2OH$; $-CH_2NHR^{22}$ wherein $R^{22}$ is H or $C_{1-2}$alkyl; $-C(O)OR^{23}$ wherein $R^{23}$ is H or $C_{1-2}$alkyl; $-C(O)NHR^{24}$ wherein $R^{24}$ is H or $C_{1-2}$alkyl; $-C(O)R^{25}$ wherein $R^{25}$ is $C_{1-2}$alkyl; fluoro; hydroxyimino (=N-OH); or ($C_{1-4}$alkoxy)imino (=N-$OR^{26}$ where $R^{26}$ is $C_{1-4}$alkyl); and wherein any OH, alkoxy, fluoroalkoxy or $NHR^{21}$ substituent is not substituted at the $R^3$ ring carbon attached (bonded) to the -NH- group of formula (I) and is not substituted at either $R^3$ ring carbon bonded to the Y group of the heterocyclic group (aa), (bb) or (cc);

and wherein, when $R^3$ is optionally substituted mono-unsaturated-$C_{5-7}$cycloalkenyl, then the cycloalkenyl is optionally substituted with one or two substituents independently being fluoro or $C_{1-2}$alkyl provided that if there are two substituents then they are not both $C_2$alkyl, and the $R^3$ ring carbon bonded to the -NH- group of formula (I) does not partake in the cycloalkenyl double bond;

and $R^{3a}$ is a hydrogen atom (H) or straight-chain $C_{1-3}$alkyl;

provided that when $R^{3a}$ is $C_{1-3}$alkyl then $R^3$ is tetrahydro-2H-pyran-4-yl, cyclohexyl (i.e. unsubstituted), 3-hydroxy-cyclohexyl, 4-oxo-cyclohexyl or 4-(hydroxyimino)cyclohexyl;

and wherein Het is of sub-formula (i), (ii), (iii), (iv) or (v):



(i) (ii) (iii) (iv) (v)

wherein:
$W^1$, $W^2$, $W^4$ and $W^5$ is N; and $W^3$ is $NR^W$;

$X^1$, $X^3$ and $X^4$ is N or $CR^X$; $X^2$ is O, S or $NR^X$; and $X^5$ is $CR^{X1}R^{X2}$ or $CR^{X3}R^{X4}$;

$Y^1$, $Y^2$ and $Y^3$ is $CR^Y$ or N; $Y^4$ is O, S or $NR^Y$ ; and $Y^5$ is $CR^{Y1}R^{Y2}$;

$Z^1$ and $Z^5$ is O, S or $NR^Z$; and $Z^2$, $Z^3$ and $Z^4$ is N or $CR^Z$;

wherein:

$R^W$ is a hydrogen atom (H) or $C_{1-2}$alkyl;

$R^X$, $R^{X2}$, $R^Y$ and $R^{Y2}$ independently are:

a hydrogen atom (H);

$C_{1-8}$alkyl;

$C_{3-6}$cycloalkyl optionally substituted by one or two $C_{1-2}$alkyl groups and/or by one oxo (=O) group;

$-(CH_2)_n{}^{2a}-C_{3-6}$cycloalkyl optionally substituted, in the $-(CH_2)_n{}^{2a}-$ moiety or in the $C_{3-6}$cycloalkyl moiety, by a $C_{1-2}$alkyl group, or optionally substituted in the $C_{3-6}$cycloalkyl moiety by a $-CH_2C(O)NHC_{1-2}$alkyl group, wherein $n^{2a}$ is 1, 2 or 3;

$-(CH_2)_n{}^3-S(O)_2-R^5$, $-CH(C_{1-2}alkyl)-S(O)_2-R^5$, $-CMe_2-S(O)_2-R^5$, or $C_{3-5}$cycloalkyl substituted at the connecting carbon atom by $-S(O)_2-R^5$, wherein $n^3$ is 1 or 2;

and $R^5$ is $C_{1-4}$alkyl, $-NR^{15}R^{16}$, phenyl, carbon-linked-pyridinyl or benzyl (wherein the phenyl and benzyl are independently optionally substituted on the aromatic ring by one or two substituents independently being fluoro, chloro, $C_{1-2}$alkyl, $C_1$fluoroalkyl, $C_{1-2}$alkoxy, $C_1$fluoroalkoxy or OH, and wherein the pyridinyl is optionally substituted by one methyl, methoxy or OH (including any tautomer thereof));

wherein $R^{15}$ is H, $C_{1-4}$alkyl, phenyl, benzyl (wherein the phenyl and benzyl are independently optionally substituted on the aromatic ring by one or two substituents independently being fluoro, chloro, $C_{1-2}$alkyl, $C_1$fluoroalkyl, $C_{1-2}$alkoxy or $C_1$fluoroalkoxy), CH(Me)Ph, or carbon-linked-pyridinyl optionally substituted by one methyl, methoxy or OH (including any tautomer thereof);

and $R^{16}$ is H or $C_{1-2}$alkyl;

or wherein $R^{15}$ and $R^{16}$ together are $-(CH_2)_n{}^{3a}-X^{3a}-(CH_2)_n{}^{3b}-$ in which $n^{3a}$ and $n^{3b}$ independently are 2 or 3 and $X^{3a}$ is a bond, $-CH_2-$, O, or $NR^{8a}$ wherein $R^{8a}$ is H or $C_{1-2}$alkyl, acetyl, $-S(O)_2Me$ or phenyl, and wherein the ring formed by $NR^{15}R^{16}$ is optionally substituted on a ring carbon by one or two substituents independently being methyl or oxo (=O);

$-(CH_2)_{n^4}-NR^6R^7$, $-CH(C_{1-2}alkyl)-NR^6R^7$, $-CMe_2-NR^6R^7$, or $C_{3-5}$cycloalkyl substituted at the connecting carbon atom by $-NR^6R^7$, wherein $n^4$ is 0, 1, 2 or 3;

and $R^6$ and $R^7$ independently are H, $C_{1-6}$alkyl, $C_{3-6}$cycloalkyl, $-CH_2-C_{3-6}$cycloalkyl, $-C(O)R^{17}$, $-S(O)_2R^{18}$, phenyl, benzyl (wherein the phenyl and benzyl are independently optionally substituted on the aromatic ring by one or two substituents independently being fluoro, chloro, $C_{1-2}$alkyl, $C_1$fluoroalkyl, $C_{1-2}$alkoxy or $C_1$fluoroalkoxy), or carbon-linked-pyridinyl optionally substituted by one methyl, methoxy or OH (including any tautomer thereof);

and wherein $R^{17}$ and $R^{18}$ independently are $C_{1-6}$alkyl, $C_{3-6}$cycloalkyl, optionally substituted 5-membered heteroaryl being furyl (furanyl) or 1,3-oxazolyl or isoxazolyl or oxadiazolyl or thienyl or 1,3-thiazolyl or isothiazolyl or pyrrolyl or imidazolyl or pyrazolyl (all independently optionally substituted by one oxo and/or one or two methyl), or phenyl or benzyl (wherein the phenyl and benzyl are independently optionally substituted on the aromatic ring by one or two substituents independently being fluoro, chloro, $C_{1-2}$alkyl, $C_1$fluoroalkyl, $C_{1-2}$alkoxy, $C_1$fluoroalkoxy or OH), or carbon-linked-pyridinyl optionally substituted by one methyl, methoxy or OH (including any tautomer thereof);

or $R^6$ and $R^7$ together are $-(CH_2)_{n^5}-X^5-(CH_2)_{n^6}-$ in which $n^5$ and $n^6$ independently are 2 or 3 and $X^5$ is a bond, $-CH_2-$, O, or $NR^8$ wherein $R^8$ is H, $C_{1-2}$alkyl, acetyl, $-S(O)_2Me$ or phenyl, and wherein the ring formed by $NR^6R^7$ is optionally substituted on a ring carbon by one or two substituents independently being methyl or oxo (=O);

$-(CH_2)_{n^7}-O-R^9$; wherein $n^7$ is 0, 1, 2 or 3 and $R^9$ is H, $C_{1-6}$alkyl, $C_{3-6}$cycloalkyl, $-CH_2-C_{3-6}$cycloalkyl, $-C(O)R^{17}$, phenyl, or benzyl (wherein the phenyl and benzyl are independently optionally substituted on the aromatic ring by one or two of fluoro, chloro, $C_{1-2}$alkyl, $C_1$fluoroalkyl, $C_{1-2}$alkoxy or $C_1$fluoroalkoxy); wherein $n^7$ is 0 only when the $-(CH_2)_{n^7}-O-R^9$ is bonded to a carbon atom in the Het ring; and wherein $n^7$ is not 0 when Het is of sub-formula (v) (i.e. $n^7$ is not 0 for $R^{X2}$ and for $R^{Y2}$);

$-(CH_2)_{n^{11}}-C(O)-NR^{10}R^{11}$, $-CH(C_{1-2}alkyl)-C(O)-NR^{10}R^{11}$, $-CMe_2-C(O)-NR^{10}R^{11}$, or $C_{3-5}$cycloalkyl substituted at the connecting carbon atom by $-C(O)-NR^{10}R^{11}$, wherein $n^{11}$ is 0, 1 or 2;

and wherein $R^{10}$ and $R^{11}$ independently are H; $C_{1-6}$alkyl; $C_{1-4}$fluoroalkyl; $C_{2-4}$alkyl substituted by one OH or $-OC_{1-2}$alkyl other than at the connection point; $C_{3-6}$cycloalkyl optionally substituted by one or two methyl groups; $-CH_2-C_{3-6}$cycloalkyl optionally substituted by one methyl,

$NH_2$ or NHMe group; -$(CH_2)_n^{17}$-$Het^2$; carbon-linked-pyridinyl optionally substituted by one methyl, methoxy or OH (including any tautomer thereof); phenyl; benzyl; or -CH($C_{1-2}$alkyl)Ph [wherein the phenyl, benzyl and -CH($C_{1-2}$alkyl)Ph are independently optionally substituted on the aromatic ring by one or two substituents independently being: fluoro, chloro, $C_{1-2}$alkyl, $C_1$fluoroalkyl, $C_{1-2}$alkoxy, $C_1$fluoroalkoxy, OH, -$NR^{10a}R^{10b}$ (wherein $R^{10a}$ is H or $C_{1-2}$alkyl and $R^{10b}$ is H, $C_{1-2}$alkyl, -C(O)-$C_{1-2}$alkyl or -$S(O)_2$-$C_{1-2}$alkyl), -C(O)-$NR^{10c}R^{10d}$ (wherein $R^{10c}$ and $R^{10d}$ independently are H or $C_{1-2}$alkyl), or -$S(O)_2$-$R^{10e}$ (wherein $R^{10e}$ is $C_{1-2}$alkyl, $NH_2$, NHMe or $NMe_2$)];

wherein $n^{17}$ is 0, 1 or 2 and wherein $Het^2$ is a 4-, 5- or 6- membered saturated heterocyclic ring containing one O or S ring atom or one $NR^{27}$ ring group wherein $R^{27}$ is H, $C_{1-2}$alkyl, -C(O)Me, or -$S(O)_2$Me, wherein the $Het^2$ ring is optionally substituted on a ring carbon by one or two substituents independently being methyl or oxo (=O);

and wherein when $n^{17}$ is 2 then the $Het^2$ ring can optionally contain one additional ring N atom at the $Het^2$ ring position bonded to the -$(CH_2)_n^{17}$- moiety; provided that, when $Het^2$ contains one O or S or $NR^{27}$ ring atom/group and one additional ring N atom, then the O/S/$NR^{27}$ ring atom/group and the one additional ring N atom are not directly bonded to each other, and are separated by more than one carbon atom;

or $R^{10}$ and $R^{11}$ together are -$(CH_2)_n^8$-$X^6$-$(CH_2)_n^9$- in which $n^8$ and $n^9$ independently are 2 or 3 and $X^6$ is a bond, -$CH_2$-, O, or $NR^{12}$ wherein $R^{12}$ is H, $C_{1-2}$alkyl, acetyl, -$S(O)_2$Me or phenyl, and wherein the ring formed by $NR^{10}R^{11}$ is optionally substituted on a ring carbon by one or two substituents independently being methyl or oxo (=O);

-$(CH_2)_n^{12}$-C(O)-$OR^{13}$ wherein $n^{12}$ is 0, 1 or 2; and wherein $R^{13}$ is H, $C_{1-6}$alkyl, $C_{3-6}$cycloalkyl, -$CH_2$-$C_{3-6}$cycloalkyl, phenyl, or benzyl (wherein the phenyl and benzyl are independently optionally substituted on the aromatic ring by one or two of (independently) fluoro, chloro, $C_{1-2}$alkyl, $C_1$fluoroalkyl, $C_{1-2}$alkoxy or $C_1$fluoroalkoxy);

-$(CH_2)_n^{13}$-C(O)-$R^{13a}$ wherein $n^{13}$ is 0, 1 or 2; and wherein $R^{13a}$ is a hydrogen atom (H), $C_{1-6}$alkyl, $C_{1-2}$fluoroalkyl, $C_{3-6}$cycloalkyl, -$CH_2$-$C_{3-6}$cycloalkyl, benzyl, or phenyl; wherein the phenyl and benzyl are independently optionally substituted on the aromatic ring by one or two of (independently) fluoro, chloro, $C_{1-2}$alkyl, $C_1$fluoroalkyl, $C_{1-2}$alkoxy or $C_1$fluoroalkoxy;

-$(CH_2)_n^{14}$-$Het^1$, –CH($C_{1-2}$alkyl)-$Het^1$, -$CMe_2$-$Het^1$, or $C_{3-5}$cycloalkyl substituted at the connecting carbon atom by $Het^1$, wherein $n^{14}$ is 0, 1 or 2 and wherein $Het^1$ is a 4-, 5-, 6- or 7-membered saturated heterocyclic ring;

wherein said heterocyclic ring $Het^1$ contains one O or S ring atom and/or one $NR^{14}$ ring group wherein $R^{14}$ is H, $C_{1-4}$alkyl, $C_{3-6}$cycloalkyl, benzyl, phenyl, $-C(O)R^{19}$, or $-S(O)_2R^{19}$;

wherein $R^{19}$, independent of any other $R^{19}$, is $C_{1-6}$alkyl, $C_{3-6}$cycloalkyl, thienyl, furyl (furanyl), or phenyl or benzyl; wherein the phenyl and benzyl are independently optionally substituted by one or two of (independently) fluoro, methyl or methoxy;

and wherein said heterocyclic ring $Het^1$ is optionally substituted (at a position or positions other than any $NR^{14}$ position) by one or two oxo (=O) and/or one $C_{1-4}$alkyl substituents;

provided that, when the heterocyclic ring $Het^1$ contains one O or S ring atom and one $NR^{14}$ ring group then: (a) the O/S ring atom and the $NR^{14}$ ring group are not directly bonded to each other, and (b) the O/S ring atom and the $NR^{14}$ ring group are separated by more than one carbon atom unless $Het^1$ contains an $-NR^{14}-C(O)-O-$ or $-NR^{14}-C(O)-S-$ moiety as part of the ring; or

$-(CH_2)_{n^{10}}$-Ar, $-CH(C_{1-2}alkyl)$-Ar, $-CMe_2$-Ar, or $C_{3-5}$cycloalkyl substituted at the connecting carbon atom by Ar, wherein $n^{10}$ is 0, 1 or 2 and

(i) Ar is phenyl optionally substituted by one or two substituents independently being fluoro, chloro, bromo, $C_{1-2}$alkyl, $C_{1-2}$fluoroalkyl, $C_{1-2}$alkoxy, $C_{1-2}$fluoroalkoxy, OH, $-NR^{11a}R^{11b}$ (wherein $R^{11a}$ is H or $C_{1-2}$alkyl and $R^{11b}$ is H, $C_{1-2}$alkyl, $-C(O)-C_{1-2}$alkyl or $-S(O)_2-C_{1-2}$alkyl), cyano, $-C(O)-NR^{11c}R^{11d}$ (wherein $R^{11c}$ and $R^{11d}$ independently are H or $C_{1-2}$alkyl), $-C(O)-OR^{11e}$ wherein $R^{11e}$ is H or $C_{1-2}$alkyl, or $-S(O)_2-R^{11f}$ (wherein $R^{11f}$ is $C_{1-2}$alkyl, $NH_2$, NHMe or $NMe_2$); or the phenyl Ar is optionally substituted at two adjacent Ar ring atoms by the two ends of a chain which is: $-(CH_2)_4-$, $-(CH_2)_3-$, or $-CH=CH-CH=CH-$; or

(ii) Ar is an optionally substituted 5- or 6-membered heterocyclic aromatic ring containing 1, 2, 3 or 4 heteroatoms selected from O, N or S; and wherein when the heterocyclic aromatic ring Ar contains 2, 3 or 4 heteroatoms, one is selected from O, N and S and the remaining heteroatom(s) are N; and wherein the heterocyclic aromatic ring Ar is optionally substituted by one or two groups independently being $C_{1-4}$alkyl or OH (including any keto tautomer of an OH-substituted aromatic ring), or the heterocyclic aromatic ring Ar is optionally substituted at two adjacent Ar ring atoms by the two ends of a chain which is: $-(CH_2)_4-$, $-(CH_2)_3-$, or $-CH=CH-CH=CH-$;

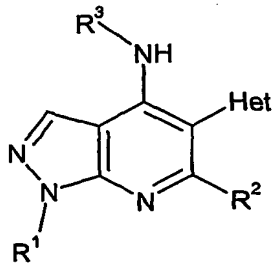
$R^{X1}$ and $R^{Y1}$ independently are a hydrogen atom (H), $C_{1-2}$alkyl or $C_1$fluoroalkyl;

$R^{X3}$ and $R^{X4}$ together are $-(CH_2)_n{}^{15}-X^7-(CH_2)_n{}^{16}-$ wherein $n^{15}$ and $n^{16}$ independently are 1 or 2 and $X^7$ is a bond, $-CH_2-$, O, or $NR^{X5}$ wherein $R^{X5}$ is H, $C_{1-2}$alkyl, acetyl or $-S(O)_2Me$; and

$R^Z$ is a hydrogen atom (H) or $C_{1-2}$alkyl,

provided that:
when $R^3$ is the heterocyclic group of sub-formula (bb), $n^1$ is 1, and Y is $NR^4$, then $R^4$ is not $C_{1-2}$alkyl, $C_{1-2}$fluoroalkyl or $CH_2C(O)NH_2$.

2. A compound of formula (IA) or a salt thereof:



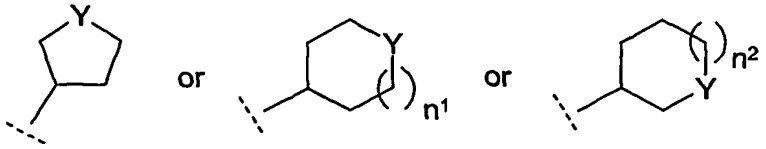

(IA)

wherein:

$R^1$ is $C_{1-4}$alkyl, $C_{1-3}$fluoroalkyl or $-(CH_2)_2OH$;

$R^2$ is a hydrogen atom (H), methyl or $C_1$fluoroalkyl;

$R^3$ is optionally substituted branched $C_{3-6}$alkyl, optionally substituted $C_{3-8}$cycloalkyl, optionally substituted phenyl, or an optionally substituted heterocyclic group of sub-formula (aa), (bb) or (cc):




(aa) (bb) (cc)

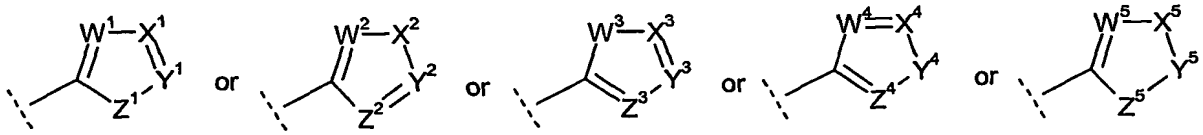
in which $n^1$ and $n^2$ independently are 1 or 2; and Y is O, S, $SO_2$, or $NR^4$; where $R^4$ is a hydrogen atom (H), $C_{1-2}$alkyl, $C_{1-2}$fluoroalkyl, $CH_2C(O)NH_2$, $C(O)NH_2$, $C(O)$-$C_{1-2}$alkyl, or $C(O)$-$C_1$fluoroalkyl;

wherein in $R^3$ the optionally substituted branched $C_{3-6}$alkyl is optionally substituted with one or two substituents being oxo (=O), OH, $C_{1-2}$alkoxy or $C_{1-2}$fluoroalkoxy; and wherein any such substituent is not substituted at the $R^3$ carbon atom attached (bonded) to the -NH- group of formula (IA);

wherein in $R^3$ the phenyl is optionally substituted with one substituent being fluoro, chloro, $C_{1-2}$alkyl, $C_{1-2}$fluoroalkyl, $C_{1-2}$alkoxy, $C_{1-2}$fluoroalkoxy or cyano;

wherein in $R^3$ the $C_{3-8}$cycloalkyl or the heterocyclic group of sub-formula (aa), (bb) or (cc) is optionally substituted with one or two substituents being oxo (=O), OH, $C_{1-2}$alkoxy, $C_{1-2}$fluoroalkoxy, or $C_{1-2}$alkyl; and wherein any OH, alkoxy or fluoroalkoxy substituent is not substituted at the $R^3$ ring carbon attached (bonded) to the -NH- group of formula (IA) and is not substituted at either $R^3$ ring carbon bonded to the Y group of the heterocyclic group (aa), (bb) or (cc);

and wherein Het is of sub-formula (i), (ii), (iii), (iv) or (v):



(i) (ii) (iii) (iv) (v)

wherein:
$W^1$, $W^2$, $W^4$ and $W^5$ is N; and $W^3$ is $NR^W$;

$X^1$, $X^3$ and $X^4$ is N or $CR^X$; $X^2$ is O, S or $NR^X$; and $X^5$ is $CR^{X1}R^{X2}$;

$Y^1$, $Y^2$ and $Y^3$ is $CR^Y$ or N; $Y^4$ is O, S or $NR^Y$; and $Y^5$ is $CR^{Y1}R^{Y2}$;

$Z^1$ and $Z^5$ is O, S or $NR^Z$; and $Z^2$, $Z^3$ and $Z^4$ is N or $CR^Z$;

wherein:
$R^W$ is a hydrogen atom (H) or $C_{1-2}$alkyl;

$R^X$, $R^{X2}$, $R^Y$ and $R^{Y2}$ independently are:
a hydrogen atom (H);
$C_{1-8}$alkyl;
$C_{3-6}$cycloalkyl optionally substituted by a $C_{1-2}$alkyl group;

$-(CH_2)_n^{2a}-C_{3-6}$cycloalkyl optionally substituted, in the $-(CH_2)_n^{2a}-$ moiety or in the $C_{3-6}$cycloalkyl moiety, by a $C_{1-2}$alkyl group, wherein $n^{2a}$ is 1, 2 or 3;

$-(CH_2)_n^3-SO_2-R^5$ wherein $n^3$ is 1 or 2 and $R^5$ is $C_{1-3}$alkyl or $-NH-C_{1-2}$alkyl or phenyl;

$-(CH_2)_n^4-NR^6R^7$ wherein $n^4$ is 0, 1, 2 or 3, and $R^6$ and $R^7$ independently are H, $C_{1-6}$alkyl, $C_{3-6}$cycloalkyl, $-CH_2-C_{3-6}$cycloalkyl, $-C(O)-C_{1-2}$alkyl, $-SO_2-C_{1-2}$alkyl, phenyl, or benzyl (wherein the phenyl or benzyl are independently optionally substituted on the aromatic ring by one of fluoro, chloro, $C_{1-2}$alkyl, $C_1$fluoroalkyl, $C_{1-2}$alkoxy or $C_1$fluoroalkoxy); or $R^6$ and $R^7$ together are $-(CH_2)_n^5-X^5-(CH_2)_n^6-$ in which $n^5$ and $n^6$ independently are 2 or 3 and $X^5$ is a bond, $-CH_2-$, O, or $NR^8$ wherein $R^8$ is H or $C_{1-2}$alkyl;

$-(CH_2)_n^7-O-R^9$; wherein $n^7$ is 0, 1, 2 or 3 and $R^9$ is H or $C_{1-6}$alkyl; wherein $n^7$ is 0 only when the $-(CH_2)_n^7-O-R^9$ is bonded to a carbon atom in the Het ring; and wherein $n^7$ is not 0 when Het is of sub-formula (v) (i.e. $n^7$ is not 0 for $R^{X2}$ and for $R^{Y2}$);

$-C(O)-NR^{10}R^{11}$ wherein $R^{10}$ and $R^{11}$ independently are H, $C_{1-6}$alkyl, $C_{3-6}$cycloalkyl, $-CH_2-C_{3-6}$cycloalkyl, phenyl, or benzyl (wherein the phenyl or benzyl are independently optionally substituted on the aromatic ring by one of fluoro, chloro, $C_{1-2}$alkyl, $C_1$fluoroalkyl, $C_{1-2}$alkoxy or $C_1$fluoroalkoxy); or $R^{10}$ and $R^{11}$ together are $-(CH_2)_n^8-X^6-(CH_2)_n^9-$ in which $n^8$ and $n^9$ independently are 2 or 3 and $X^6$ is a bond, $-CH_2-$, O, or $NR^{12}$ wherein $R^{12}$ is H or $C_{1-2}$alkyl;

$-C(O)-OR^{13}$ wherein $R^{13}$ is H, $C_{1-6}$alkyl, $C_{3-6}$cycloalkyl, $-CH_2-C_{3-6}$cycloalkyl, phenyl, or benzyl (wherein the phenyl or benzyl are independently optionally substituted on the aromatic ring by one of fluoro, chloro, $C_{1-2}$alkyl, $C_1$fluoroalkyl, $C_{1-2}$alkoxy or $C_1$fluoroalkoxy);

$-C(O)-R^{13a}$ wherein $R^{13a}$ is a hydrogen atom (H), $C_{1-6}$alkyl, $C_{1-2}$fluoroalkyl, $C_{3-6}$cycloalkyl, $-CH_2-C_{3-6}$cycloalkyl, benzyl, or phenyl; wherein the phenyl or benzyl are independently optionally substituted on the aromatic ring by one of fluoro, chloro, $C_{1-2}$alkyl, $C_1$fluoroalkyl, $C_{1-2}$alkoxy or $C_1$fluoroalkoxy;

a 4-, 5-, 6- or 7-membered saturated heterocyclic ring containing one O ring atom or one $NR^{14}$ ring group wherein $R^{14}$ is H or $C_{1-4}$alkyl, said heterocyclic ring being optionally substituted (at a position or positions other than any $NR^{14}$ position) by one oxo (=O) and/or one $C_{1-4}$alkyl substituent; or

$-(CH_2)_n^{10}$-Ar wherein $n^{10}$ is 0, 1 or 2 and

(i) Ar is phenyl optionally substituted by one or two substituents being fluoro, chloro, $C_{1-2}$alkyl, $C_{1-2}$fluoroalkyl, $C_{1-2}$alkoxy, $C_{1-2}$fluoroalkoxy or cyano; or

(ii) Ar is an optionally substituted 5- or 6-membered heterocyclic aromatic ring containing 1, 2 or 3 heteroatoms selected from O, N or S; and wherein when the heterocyclic aromatic ring Ar contains 2 or 3 heteroatoms, one is selected from O, N and S and the remaining heteroatom(s) are N; and wherein the heterocyclic aromatic ring Ar is optionally substituted by one or two $C_{1-4}$alkyl groups;

$R^{X1}$ and $R^{Y1}$ independently are a hydrogen atom (H), $C_{1-2}$alkyl or $C_1$fluoroalkyl; and

$R^Z$ is a hydrogen atom (H) or $C_{1-2}$alkyl;

provided that, when $R^3$ is the heterocyclic group of sub-formula (bb), $n^1$ is 1, and Y is $NR^4$, then $R^4$ is not $C_{1-2}$alkyl, $C_{1-2}$fluoroalkyl or $CH_2C(O)NH_2$.

3. A compound or salt as claimed in claim 1, wherein $R^{3a}$ is a hydrogen atom (H).

4. A compound or salt as claimed in claim 1, 2 or 3, wherein $R^2$ is a hydrogen atom (H) or methyl.

5. A compound or salt as claimed in claim 1, 2, 3 or 4, wherein $R^1$ is $C_{1-3}$alkyl, $C_{1-2}$fluoroalkyl or $-CH_2CH_2OH$.

6. A compound or salt as claimed in any preceding claim, wherein $R^1$ is ethyl, n-propyl, $C_2$fluoroalkyl or $-CH_2CH_2OH$.

7. A compound or salt as claimed in any preceding claim, wherein $R^1$ is ethyl.

8. A compound or salt as claimed in any preceding claim, wherein in $R^3$ there is one substituent or no substituent.

9. A compound or salt as claimed in any preceding claim, wherein, where $R^3$ is optionally substituted branched $C_{3-6}$alkyl, then $R^3$ is isobutyl, sec-butyl, t-butyl or 3-methylbutan-2-yl.

10. A compound or salt as claimed in any preceding claim, wherein, when $R^3$ is optionally substituted phenyl, then the phenyl is optionally substituted with one substituent being fluoro, $C_1$alkyl, $C_1$fluoroalkyl, $C_1$alkoxy, or $C_1$fluoroalkoxy.

11. A compound or salt as claimed in any preceding claim, wherein, where $R^3$ is optionally substituted $C_{3-8}$cycloalkyl, then $R^3$ is optionally substituted $C_{6-8}$cycloalkyl.

12. A compound or salt as claimed in claim 11, wherein, where $R^3$ is optionally substituted $C_{3-8}$cycloalkyl, then $R^3$ is optionally substituted cyclohexyl.

13. A compound or salt as claimed in any preceding claim, wherein, where $R^3$ is optionally substituted $C_{3-8}$cycloalkyl, then the one or two optional substituents is or independently are: oxo (=O); OH; $NHR^{21}$ wherein $R^{21}$ is a hydrogen atom (H); methyl; $-CH_2F$; $-CHF_2$; $-C(O)OR^{23}$ wherein $R^{23}$ is H; fluoro; hydroxyimino (=N-OH); or ($C_{1-2}$alkoxy)imino (=N-$OR^{26}$ where $R^{26}$ is $C_{1-2}$alkyl).

14. A compound or salt as claimed in any preceding claim, wherein, where $R^3$ is optionally substituted $C_{3-8}$cycloalkyl, then the one or two optional substituents is or independently are OH, oxo (=O) or hydroxyimino (=N-OH).

15. A compound or salt as claimed in any preceding claim, wherein, where $R^3$ is optionally substituted $C_{3-8}$cycloalkyl, then the one or two optional substituents if present is or are substituent(s) at the 3-, 4- or 5- position(s) of the $R^3$ cycloalkyl ring, (wherein the 1-position of the $R^3$ cycloalkyl ring is deemed to be the connection point to the -NH- in formula (I) or (IA) or (IB)).

16. A compound or salt as claimed in any preceding claim, wherein, where $R^3$ is optionally substituted $C_6$cycloalkyl, then $R^3$ is cyclohexyl (i.e. unsubstituted), 3-hydroxy-cyclohexyl (i.e. 3-hydroxycyclohexan-1-yl), 4-oxo-cyclohexyl (i.e. 4-oxocyclohexan-1-yl), 4-(hydroxyimino)cyclohexyl (i.e. 4-(hydroxyimino)cyclohexan-1-yl), 4-($C_{1-2}$alkoxyimino)cyclohexyl, 1-methylcyclohexyl or 3-methylcyclohexyl.

17. A compound or salt as claimed in any preceding claim, wherein, where $R^3$ is optionally substituted mono-unsaturated-$C_{5-7}$cycloalkenyl, then $R^3$ is optionally substituted mono-unsaturated-$C_6$cycloalkenyl (i.e. optionally substituted mono-unsaturated-cyclohexenyl), and wherein the $R^3$ cycloalkenyl is optionally substituted with one or two substituents independently being fluoro or methyl.

18. A compound or salt as claimed in any preceding claim, wherein $R^4$ is a hydrogen atom (H) or C(O)-Me.

19. A compound or salt as claimed in any preceding claim, wherein, where $R^3$ is the heterocyclic group of sub-formula (aa), (bb) or (cc), then Y is O.

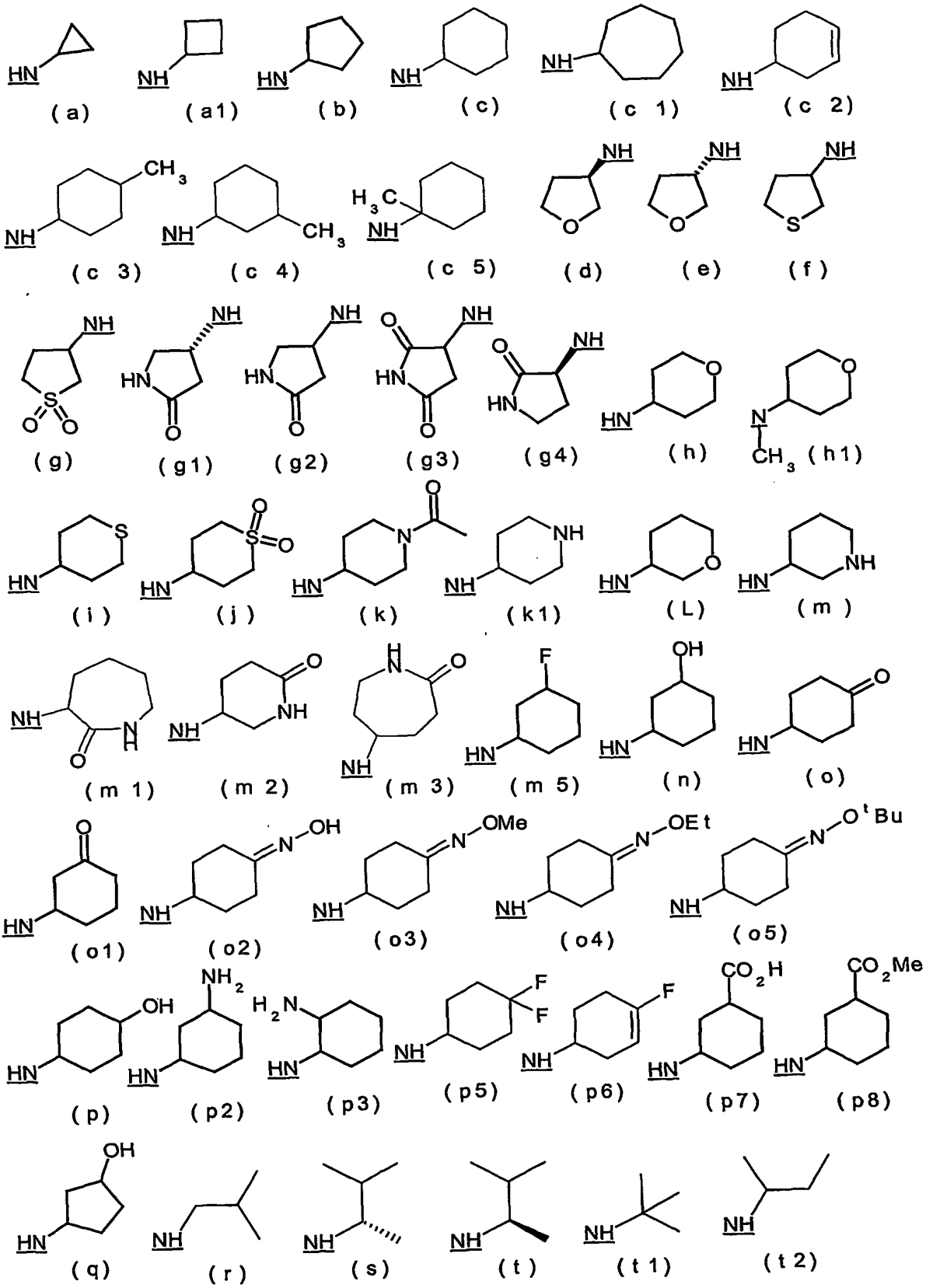
20. A compound or salt as claimed in any preceding claim, wherein where $R^3$ is the heterocyclic group of sub-formula (aa), (bb) or (cc), then $R^3$ is the heterocyclic group of sub-formula (bb) and $n^1$ is 1.

21. A compound or salt as claimed in any preceding claim, wherein, in $R^3$, the heterocyclic group of sub-formula (aa), (bb) or (cc) is unsubstituted (wherein, where Y is $NR^4$, $R^4$ is not classified as a substituent).

22. A compound or salt as claimed in any of claims 1 to 20, wherein, in the $R^3$ heterocyclic group of sub-formula (aa), (bb) or (cc), the one or two optional substituents is or are oxo (=O).

23. A compound or salt as claimed in any preceding claim, wherein
when $R^3$ is the heterocyclic group of sub-formula (aa), then Y is not $NR^4$, and
when $R^3$ is the heterocyclic group of sub-formula (bb) and Y is $NR^4$, then $R^4$ is not $C_{1-2}$alkyl, $C_{1-2}$fluoroalkyl or $CH_2C(O)NH_2$.

24. A compound or salt as claimed in any preceding claim, wherein $NHR^3$ or $NR^3R^{3a}$ is of sub-formula (a), (a1), (b), (c), (c 1), (c 2), (c 3), (c 4), (c 5), (d), (e), (f), (g), (g1), (g2), (g3), (g4), (h), (h1), (i), (j), (k), (k1), (L), (m), (m1), (m2), (m3), (m5), (n), (o), (o1), (o2), (o3), (o4), (o5), (p), (p2), (p3), (p5), (p6), (p7), (p8), (q), (r), (s), (t), (t1) or (t2):


(a)
(a1)
(b)
(c)
(c 1)
(c 2)
(c 3)
(c 4)
(c 5)
(d)
(e)
(f)
(g)
(g1)
(g2)
(g3)
(g4)
(h)
(h1)
(i)
(j)
(k)
(k1)
(L)
(m)
(m 1)
(m 2)
(m 3)
(m 5)
(n)
(o)
(o1)
(o2)
(o3)
(o4)
(o5)
(p)
(p2)
(p3)
(p5)
(p6)
(p7)
(p8)
(q)
(r)
(s)
(t)
(t 1)
(t 2)

25. A compound or salt as claimed in claim 24, wherein $NHR^3$ or $NR^3R^{3a}$ is of sub-formula (c), (c1), (c 4), (c 5), (h), (i), (j), (k), (m1), (m2), (n), (o), (o2), (o3), (p2), (p5), (p6), (r), (s) or (t1).

26. A compound or salt as claimed in claim 24, wherein $NHR^3$ or $NR^3R^{3a}$ is of sub-formula (c), (h), (k), (n), (o), (o2) or (s).

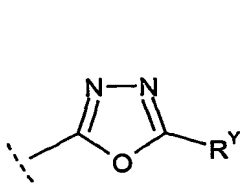
27. A compound or salt as claimed in claim 24, wherein $NHR^3$ or $NR^3R^{3a}$ is of sub-formula (a), (b), (c), (d), (e), (f), (g), (h), (i), (j), (k), (L), (m), (n), (o), (p), (q), (r), (s) or (t).

28. A compound or salt as claimed in claim 24, wherein $R^3$ is tetrahydro-2H-pyran-4-yl; that is $NHR^3$ or $NR^3R^{3a}$ is of sub-formula (h).

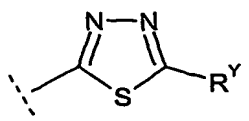
29. A compound or salt as claimed in any preceding claim, wherein Het is of sub-formula (i), (ii) or (v).

30. A compound or salt as claimed in claim 29, wherein $Z^1$ and $Z^5$ are O.

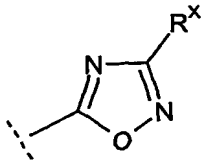
31. A compound or salt as claimed in claim 29 or 30, wherein Het is of sub-formula (ia), (ib), (ic), (id), (ie), (if), (ig), (va), (vb) or (iia):



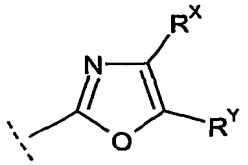
(ia)



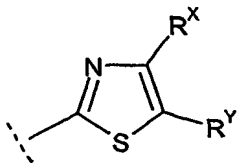
(ib)



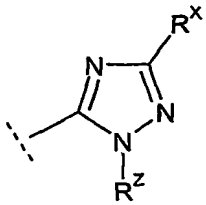
(ic)



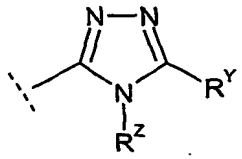
(id)



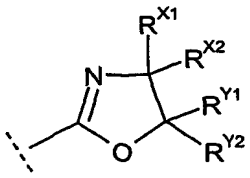
(ie)



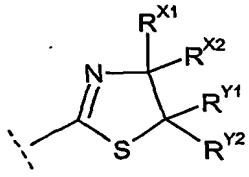
(i f)



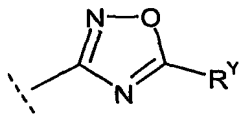
(ig)



(va)



(vb)



(iia)

32. A compound or salt as claimed in claim 31, wherein Het is of sub-formula (ia), (ib), (ic), (id), (if), (ig), (va) or (iia).

33. A compound or salt as claimed in claim 31, wherein Het is of sub-formula (ia), (ic), (id) or (va).

34. A compound or salt as claimed in any preceding claim, wherein $R^W$ and $R^Z$ are a hydrogen atom (H).

35. A compound or salt as claimed in any preceding claim, wherein for the Het group, one of $R^X$ and $R^Y$ (or $R^{X2}$ and $R^{Y2}$) is as defined herein and the other of $R^X$ and $R^Y$ (or $R^{X2}$ and $R^{Y2}$) is a hydrogen atom (H).

36. A compound or salt as claimed in any preceding claim, wherein $R^X$, $R^{X2}$, $R^Y$ and $R^{Y2}$ independently are:

a hydrogen atom (H);

$C_{1-8}$alkyl;

optionally substituted $C_{3-6}$cycloalkyl;

optionally substituted $-(CH_2)_n{}^{2a}$-$C_{3-6}$cycloalkyl;

$-(CH_2)_n{}^3-S(O)_2-R^5$, $-CH(Me)-S(O)_2-R^5$, or $C_3$cycloalkyl substituted at the connecting carbon atom by $-S(O)_2-R^5$;

$-(CH_2)_n{}^4-NR^6R^7$ or $-CH(Me)-NR^6R^7$;

$-(CH_2)_n{}^7-O-R^9$;

$-(CH_2)_n{}^{11}-C(O)-NR^{10}R^{11}$ or $-CH(Me)-C(O)-NR^{10}R^{11}$;

$-(CH_2)_n{}^{12}-C(O)-OR^{13}$;

$-(CH_2)_n{}^{13}-C(O)-R^{13a}$;

$-(CH_2)_n{}^{14}-Het^1$ or $-CH(Me)-Het^1$; or

$-(CH_2)_n{}^{10}-Ar$ or $-CH(Me)-Ar$.

37. A compound or salt as claimed in any preceding claim, wherein one of $R^X$ and $R^Y$, and for Het of sub-formula (v) one of $R^{X2}$ and $R^{Y2}$, is:
$-(CH_2)_n{}^4-NR^6R^7$, $-CH(Me)-NR^6R^7$, $-(CH_2)_n{}^{11}-C(O)-NR^{10}R^{11}$, $-(CH_2)_n{}^{14}-Het^1$, or $-(CH_2)_n{}^{10}-Ar$.

38. A compound or salt as claimed in any preceding claim, wherein $R^X$, $R^{X2}$, $R^Y$ and $R^{Y2}$ independently are:

$C_{1-6}$alkyl;

optionally substituted $C_{3-6}$cycloalkyl;

$-(CH_2)_n{}^{2a}-C_{3-6}$cycloalkyl optionally substituted by a $C_{1-2}$alkyl group; wherein $n^{2a}$ is 1;

$-(CH_2)_n{}^3-S(O)_2-R^5$ or $C_3$cycloalkyl substituted at the connecting carbon atom by $-S(O)_2-Ph$, wherein $n^3$ is 1 and $R^5$ is $C_{1-4}$alkyl, $-NR^{15}R^{16}$, optionally substituted phenyl or optionally substituted benzyl; wherein $R^{16}$ is H or methyl and $R^{15}$ is H, $C_{1-4}$alkyl or optionally substituted phenyl; or $R^{15}$ and $R^{16}$ together are $-(CH_2)_n{}^{3a}-X^{3a}-(CH_2)_n{}^{3b}-$ wherein $n^{3a}$ and $n^{3b}$ are 2 and $X^{3a}$ is a bond, $-CH_2-$, O, or $NR^{8a}$ wherein $R^{8a}$ is $C_{1-2}$alkyl or acetyl; and the ring formed by $NR^{15}R^{16}$ is not substituted on a ring carbon or is substituted on a ring carbon by one methyl or oxo (=O) substituent;

$-(CH_2)_n{}^4-NR^6R^7$, $-CH(Me)-NR^6R^7$ or $-CMe_2-NR^6R^7$ wherein $n^4$ is 0 (when the $-(CH_2)_n{}^4-NR^6R^7$ is bonded to a carbon atom in the Het ring) or wherein $n^4$ is 1; and wherein $R^6$ is H or $C_{1-4}$alkyl and $R^7$ is H, $C_{1-4}$alkyl, $-C(O)R^{17}$ or $-S(O)_2R^{18}$; or $R^6$

and $R^7$ together are $-(CH_2)_n{}^5-X^5-(CH_2)_n{}^6-$ in which $n^5$ and $n^6$ are 2 and $X^5$ is a bond, $-CH_2-$, O, or $NR^8$, and wherein the ring formed by $NR^6R^7$ is not substituted on a ring carbon or is substituted on a ring carbon by one methyl or oxo (=O) substituent;

$-(CH_2)_n{}^7-O-R^9$, wherein $n^7$ is 1 or 2 and $R^9$ is H, $C_{1-4}$alkyl or phenyl;

$-(CH_2)_n{}^{11}-C(O)-NR^{10}R^{11}$, $-CH(Me)-C(O)-NR^{10}R^{11}$ or $-CMe_2-C(O)-NR^{10}R^{11}$, wherein $n^{11}$ is 0 or 1,

and $R^{10}$ is H or $C_{1-6}$alkyl,

and $R^{11}$ is: H; $C_{1-6}$alkyl; $C_{3-6}$cycloalkyl optionally substituted by one or two methyl groups; $-CH_2-C_{3-6}$cycloalkyl (unsubstituted); $-(CH_2)_n{}^{17}-Het^2$; optionally substituted carbon-linked-pyridinyl; optionally substituted phenyl, optionally substituted benzyl; or optionally substituted $-CH(C_{1-2}alkyl)Ph$; wherein the phenyl, the benzyl and the $-CH(C_{1-2}alkyl)Ph$ are independently optionally substituted on the aromatic ring by one or two substituents independently being: fluoro, chloro, $C_{1-2}$alkyl, $C_1$fluoroalkyl, $C_{1-2}$alkoxy, $C_1$fluoroalkoxy, $-NR^{10a}R^{10b}$ (wherein $R^{10a}$ is H or methyl and $R^{10b}$ is H, $C_{1-2}$alkyl, -C(O)Me or $-S(O)_2Me$), $-C(O)-NR^{10c}R^{10d}$ (wherein $R^{10c}$ and $R^{10d}$ independently are H or $C_{1-2}$alkyl), or $-S(O)_2-R^{10e}$ (wherein $R^{10e}$ is $C_{1-2}$alkyl, $NH_2$, NHMe or $NMe_2$); and wherein the carbon-linked-pyridinyl is preferably optionally substituted by one OH (including any keto tautomer thereof);

or $R^{10}$ and $R^{11}$ together are $-(CH_2)_n{}^8-X^6-(CH_2)_n{}^9-$ in which $n^8$ and $n^9$ are 2 and $X^6$ is a bond, $-CH_2-$, O, or $NR^{12}$; , and wherein the ring formed by $NR^{10}R^{11}$ is not substituted on a ring carbon or is substituted on a ring carbon by one methyl or oxo (=O) substituent;

$-(CH_2)_n{}^{12}-C(O)-OR^{13}$, wherein $n^{12}$ is 0 or 1, and $R^{13}$ is H or $C_{1-4}$alkyl;

$-(CH_2)_n{}^{13}-C(O)-R^{13a}$, $n^{13}$ is 0 or 1, and $R^{13a}$ is $C_{1-6}$alkyl, $C_{1-2}$fluoroalkyl, $C_{3-6}$cycloalkyl, $-CH_2-C_{3-6}$cycloalkyl, benzyl, or phenyl (wherein the phenyl and benzyl are independently optionally substituted on the aromatic ring by one of fluoro, chloro, $C_{1-2}$alkyl, $C_1$fluoroalkyl, $C_{1-2}$alkoxy or $C_1$fluoroalkoxy);

$-(CH_2)_n{}^{14}-Het^1$, $-CH(Me)-Het^1$, or $-CMe_2-Het^1$, wherein $n^{14}$ is 0 or 1, and $Het^1$ is 4-, 5- or 6-membered heterocyclic ring, and $R^{14}$ is $C_{1-4}$alkyl, $C(O)R^{19}$ or $S(O)_2R^{19}$ wherein $R^{19}$ is $C_{1-4}$alkyl, $C_{3-6}$cycloalkyl, 2-thienyl, furan-2-yl, phenyl (unsubstituted) or benzyl (unsubstituted);

or

$-(CH_2)_n{}^{10}$-Ar wherein $n^{10}$ is 0 or 1.

39. A compound or salt as claimed in any preceding claim, which is:

N-Cyclopentyl-1-ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
N-Cyclopentyl-1-ethyl-5-{5-[(methylsulfonyl)methyl]-1,3,4-oxadiazol-2-yl}-1H-pyrazolo[3,4-b]pyridin-4-amine,
N-Cyclopentyl-1-ethyl-5-(5-isopropyl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
N-Cyclopentyl-1-ethyl-5-(5-methyl-1,3,4-thiadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
N-Cyclopentyl-1-ethyl-5-{5-[(methylsulfonyl)methyl]-1,3,4-thiadiazol-2-yl}-1H-pyrazolo[3,4-b]pyridin-4-amine,
N-Cyclopentyl-1-ethyl-5-(5-isopropyl-1,3,4-thiadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
1-Ethyl-N-(4-fluorophenyl)-5-(3-methyl-1,2,4-oxadiazol-5-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
N-Cyclopentyl-5-(1,3-dimethyl-1H-1,2,4-triazol-5-yl)-1-ethyl-1H-pyrazolo[3,4-b]pyridin-4-amine,
1-Ethyl-5-(5-isopropyl-1,3,4-oxadiazol-2-yl)-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-b]pyridin-4-amine,
N-Cyclohexyl-1-ethyl-5-(5-isopropyl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
1-Ethyl-N-isobutyl-5-(5-isopropyl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
1-Ethyl-N-isobutyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
N-Cyclohexyl-1-ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
1-Ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-b]pyridin-4-amine,
N-[(1R)-1,2-dimethylpropyl]-1-ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
N-[(1S)-1,2-dimethylpropyl]-1-ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
5-(5-Tert-butyl-1,3,4-oxadiazol-2-yl)-1-ethyl-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-b]pyridin-4-amine,
5-(5-Tert-butyl-1,3,4-oxadiazol-2-yl)-N-cyclohexyl-1-ethyl-1H-pyrazolo[3,4-b]pyridin-4-amine,
5-(5-Tert-butyl-1,3,4-oxadiazol-2-yl)-N-cyclopentyl-1-ethyl-1H-pyrazolo[3,4-b]pyridin-4-amine,
5-(5-Tert-butyl-1,3,4-oxadiazol-2-yl)-1-ethyl-N-isobutyl-1H-pyrazolo[3,4-b]pyridin-4-amine,
5-(5-Tert-butyl-1,3,4-oxadiazol-2-yl)-N-[(1S)-1,2-dimethylpropyl]-1-ethyl-1H-pyrazolo[3,4-b]pyridin-4-amine,
5-(5-Tert-butyl-1,3,4-oxadiazol-2-yl)-N-[(1R)-1,2-dimethylpropyl]-1-ethyl-1H-pyrazolo[3,4-b]pyridin-4-amine,
1-Ethyl-5-{5-[(methylsulfonyl)methyl]-1,3,4-oxadiazol-2-yl}-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-b]pyridin-4-amine,
N-Cyclohexyl-1-ethyl-5-{5-[(methylsulfonyl)methyl]-1,3,4-oxadiazol-2-yl}-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-Ethyl-N-isobutyl-5-{5-[(methylsulfonyl)methyl]-1,3,4-oxadiazol-2-yl}-1H-pyrazolo[3,4-b]pyridin-4-amine,
N-[(1S)-1,2-dimethylpropyl]-1-ethyl-5-{5-[(methylsulfonyl)methyl]-1,3,4-oxadiazol-2-yl}-1H-pyrazolo[3,4-b]pyridin-4-amine,
N-[(1R)-1,2-dimethylpropyl]-1-ethyl-5-{5-[(methylsulfonyl)methyl]-1,3,4-oxadiazol-2-yl}-1H-pyrazolo[3,4-b]pyridin-4-amine,
1-Ethyl-5-(3-methyl-1,2,4-oxadiazol-5-yl)-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-b]pyridin-4-amine,
1-Ethyl-5-[3-(methoxymethyl)-1,2,4-oxadiazol-5-yl]-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-b]pyridin-4-amine,
5-{3-[(Dimethylamino)methyl]-1,2,4-oxadiazol-5-yl}-1-ethyl-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-b]pyridin-4-amine,
1-Ethyl-5-[3-(morpholin-4-ylmethyl)-1,2,4-oxadiazol-5-yl]-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-b]pyridin-4-amine,
5-(5-Cyclopropyl-1,3,4-oxadiazol-2-yl)-1-ethyl-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-b]pyridin-4-amine,
N-(1-Acetylpiperidin-4-yl)-1-ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
1-Ethyl-5-[5-(3-methyloxetan-3-yl)-1,3,4-oxadiazol-2-yl]-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-b]pyridin-4-amine,
1-Ethyl-5-{5-[(4-methylpiperazin-1-yl)methyl]-1,3,4-oxadiazol-2-yl}-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-b]pyridin-4-amine,
5-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-isopropyl-1,3,4-oxadiazole-2-carboxamide,
4-{5-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3,4-oxadiazol-2-yl}-1-methylpyrrolidin-2-one,
1-Ethyl-N-tetrahydro-2H-pyran-4-yl-5-(5-tetrahydro-2H-pyran-4-yl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
1-Ethyl-5-[5-(morpholin-4-ylmethyl)-1,3,4-oxadiazol-2-yl]-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-b]pyridin-4-amine,
5-[5-(Tert-butoxymethyl)-1,3,4-oxadiazol-2-yl]-1-ethyl-N-tetrahydro-2H-pyran-4-yl-1H-pyrazolo[3,4-b]pyridin-4-amine, or
methyl 2-[1-ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,3-oxazole-4-carboxylate;

or a salt thereof.

40. A compound or salt as claimed in any of claims 1 to 38, which is:

Methyl 2-[1-ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-4,5-dihydro-1,3-oxazole-4-carboxylate,

1-Ethyl-5-(4-methyl-4,5-dihydro-1,3-oxazol-2-yl)-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-(n-Propyl)-5-(5-methyl-1,3,4-oxadiazol-2-yl)-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
1-Ethyl-5-[5-(tetrahydrofuran-2-yl)-1,3,4-oxadiazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
1-Ethyl-5-[5-(dimethylamino)-1,3,4-oxadiazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
1-Ethyl-5-(5-methyl-1,2,4-triazol-3-yl)-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
N-(1-Acetylpiperidin-4-yl)-1-ethyl-5-(3-methyl-1,2,4-oxadiazol-5-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine, or
N-(1-Acetylpiperidin-4-yl)-1-ethyl-5-[3-(morpholin-4-ylmethyl)-1,2,4-oxadiazol-5-yl]-1H-pyrazolo[3,4-b]pyridin-4-amine;

or a salt thereof.

41. A compound or salt as claimed in any of claims 1 to 38, which is:

1-Ethyl-5-[(4R)-4-phenyl-4,5-dihydro-1,3-oxazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
1-Ethyl-5-[(4S)-4-phenyl-4,5-dihydro-1,3-oxazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
1-Ethyl-5-[(4S)-4-(phenylmethyl)-4,5-dihydro-1,3-oxazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
1-Ethyl-5-[(4R)-4-(phenylmethyl)-4,5-dihydro-1,3-oxazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
1-Ethyl-5-[(4S,5R)-5-methyl-4-phenyl-4,5-dihydro-1,3-oxazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
1-Ethyl-5-[(5R)-5-phenyl-4,5-dihydro-1,3-oxazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
1-Ethyl-5-[(5S)-5-phenyl-4,5-dihydro-1,3-oxazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
5-(4,4-Dimethyl-4,5-dihydro-1,3-oxazol-2-yl)-1-ethyl-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
2-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3-oxazole-4-carboxylic acid,
2-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-(1-methylethyl)-1,3-oxazole-4-carboxamide,
1-Ethyl-5-[4-(4-morpholinylcarbonyl)-1,3-oxazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

1-Ethyl-N-methyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
*trans*-4-{[1-Ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-yl]amino}cyclohexanol,
1-Ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-N-(tetrahydro-2H-pyran-3-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
4-{[1-Ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-1H-pyrazolo[3,4-b]pyridin-4-yl]amino}cyclohexanone,
1-Ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-N-n-propyl-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
5-[5-(1,1-Dimethylethyl)-1,3,4-oxadiazol-2-yl]-1-ethyl-6-methyl-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
1-Ethyl-6-methyl-N-(tetrahydro-2H-pyran-4-yl)-5-[5-(tetrahydro-2H-pyran-4-yl)-1,3,4-oxadiazol-2-yl]-1H-pyrazolo[3,4-b]pyridin-4-amine,
5-(5-Cyclobutyl-1,3,4-oxadiazol-2-yl)-1-ethyl-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
5-{5-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3,4-oxadiazol-2-yl}-2-pyrrolidinone,
N-({5-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3,4-oxadiazol-2-yl}methyl)acetamide,
1-Ethyl-5-[5-(1-methyl-2-piperidinyl)-1,3,4-oxadiazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
1-Ethyl-5-{5-[(4-methyl-1,2,5-oxadiazol-3-yl)methyl]-1,3,4-oxadiazol-2-yl}-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
3-{5-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3,4-oxadiazol-2-yl}cyclopentanone,
1-Ethyl-5-[5-(tetrahydro-3-furanyl)-1,3,4-oxadiazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
(4S)-4-{5-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3,4-oxadiazol-2-yl}-1,3-thiazolidin-2-one,
5-[5-(2,2-Dimethylcyclopropyl)-1,3,4-oxadiazol-2-yl]-1-ethyl-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
N-({5-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3,4-oxadiazol-2-yl}methyl)-N-methylacetamide,
1-Ethyl-N-(tetrahydro-2H-pyran-4-yl)-5-[5-(tetrahydro-2H-pyran-4-ylmethyl)-1,3,4-oxadiazol-2-yl]-1H-pyrazolo[3,4-b]pyridin-4-amine,
1-Ethyl-5-[5-(1-methylcyclobutyl)-1,3,4-oxadiazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
1-Ethyl-5-[5-(3-methyl-5-isoxazolyl)-1,3,4-oxadiazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
1-Ethyl-5-[5-(1-methyl-1H-pyrazol-5-yl)-1,3,4-oxadiazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,

5-[5-(1-Acetyl-4-piperidinyl)-1,3,4-oxadiazol-2-yl]-1-ethyl-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
1-Ethyl-5-{3-[(4-methyl-1-piperazinyl)methyl]-1,2,4-oxadiazol-5-yl}-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine,
1-Ethyl-5-[3-(4-fluorophenyl)-1,2,4-oxadiazol-5-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine, or
1-Ethyl-5-{3-[2-oxo-2-(1-pyrrolidinyl)ethyl]-1,2,4-oxadiazol-5-yl}-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine;

or a salt thereof.

42. A compound or salt as claimed in any of claims 1 to 38, which is:

2-{5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}-*N*-phenylacetamide,
2-{5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}-*N*-(1-phenylethyl)acetamide,
1-Ethyl-5-{3-[2-oxo-2-(1-piperidinyl)ethyl]-1,2,4-oxadiazol-5-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
2-{5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}-*N*-(phenylmethyl)acetamide,
2-{5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}-*N*,*N*-dimethylacetamide,
*N*-Ethyl-2-{5-[1-ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}acetamide,
1-Ethyl-5-{3-[1-(4-morpholinyl)ethyl]-1,2,4-oxadiazol-5-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
5-[3-(Cyclohexylmethyl)-1,2,4-oxadiazol-5-yl]-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-5-{3-[2-oxo-2-(1-piperidinyl)ethyl]-1,2,4-oxadiazol-5-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-ethyl-5-{3-[2-(4-methyl-1-piperazinyl)-2-oxoethyl]-1,2,4-oxadiazol-5-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-5-[5-(1*H*-1,2,3-triazol-1-ylmethyl)-1,3,4-oxadiazol-2-yl]-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
5-{5-[(2,4-Dimethyl-1,3-thiazol-5-yl)methyl]-1,3,4-oxadiazol-2-yl}-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-5-[5-(2-furanylmethyl)-1,3,4-oxadiazol-2-yl]-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-5-[5-(3-isoxazolylmethyl)-1,3,4-oxadiazol-2-yl]-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,

1-ethyl-5-(5-{[4-(methyloxy)phenyl]methyl}-1,3,4-oxadiazol-2-yl)-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-5-[5-(1*H*-tetrazol-1-ylmethyl)-1,3,4-oxadiazol-2-yl]-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-5-[5-(5-isothiazolylmethyl)-1,3,4-oxadiazol-2-yl]-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-5-{5-[(3-methyl-5-isoxazolyl)methyl]-1,3,4-oxadiazol-2-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
5-(5-{[4-(Dimethylamino)phenyl]methyl}-1,3,4-oxadiazol-2-yl)-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine (1:1),
1-Ethyl-5-{5-[(2-methyl-1,3-thiazol-4-yl)methyl]-1,3,4-oxadiazol-2-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
2-[1-({5-[1-ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,3,4-oxadiazol-2-yl}methyl)cyclopentyl]-*N*-methylacetamide,
*N*-({5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,3,4-oxadiazol-2-yl}methyl)cyclopropanecarboxamide,
1-Ethyl-5-{5-[(5-methyl-3-isoxazolyl)methyl]-1,3,4-oxadiazol-2-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-5-{5-[(5-methyl-3-isoxazolyl)methyl]-1,3,4-oxadiazol-2-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-5-{5-[2-(4-methyl-1,3-thiazol-5-yl)ethyl]-1,3,4-oxadiazol-2-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
5-{5-[(3,5-Dimethyl-4-isoxazolyl)methyl]-1,3,4-oxadiazol-2-yl}-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
*N*-(1-{5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,3,4-oxadiazol-2-yl}ethyl)acetamide,
5-{5-[(1-acetyl-4-piperidinyl)methyl]-1,3,4-oxadiazol-2-yl}-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-5-{5-[(4-methylphenyl)methyl]-1,3,4-oxadiazol-2-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-5-[5-(4-methylphenyl)-1,3,4-oxadiazol-2-yl]-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
5-[5-(3,4-Dimethylphenyl)-1,3,4-oxadiazol-2-yl]-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
5-[5-(2,4-Dimethylphenyl)-1,3,4-oxadiazol-2-yl]-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
5-{5-[(4-Bromophenyl)methyl]-1,3,4-oxadiazol-2-yl}-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
2-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-*N*-(phenylmethyl)-1,3-oxazole-4-carboxamide,
2-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-{[4-(methyloxy)phenyl]methyl}-1,3-oxazole-4-carboxamide,

2-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-[(2-methylphenyl)methyl]-1,3-oxazole-4-carboxamide,
2-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-[(4-methylphenyl)methyl]-1,3-oxazole-4-carboxamide,
2-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-[(3-methylphenyl)methyl]-1,3-oxazole-4-carboxamide,
N-[(4-Chlorophenyl)methyl]-2-[1-ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3-oxazole-4-carboxamide,
N-[(2,3-Dimethylphenyl)methyl]-2-[1-ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3-oxazole-4-carboxamide,
N-[(3,5-Dimethylphenyl)methyl]-2-[1-ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3-oxazole-4-carboxamide,
N-[(3,4-Dimethylphenyl)methyl]-2-[1-ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3-oxazole-4-carboxamide,
2-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-(1-phenylethyl)-1,3-oxazole-4-carboxamide,
2-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-{(1R)-1-[4-(methyloxy)phenyl]ethyl}-1,3-oxazole-4-carboxamide,
2-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-[(1R)-1-phenylpropyl]-1,3-oxazole-4-carboxamide,
2-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-(4-methylphenyl)-1,3-oxazole-4-carboxamide,
2-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-({4-[(methylsulfonyl)amino]phenyl}methyl)-1,3-oxazole-4-carboxamide,
2-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-{[4-(methylsulfonyl)phenyl]methyl}-1,3-oxazole-4-carboxamide,
N-(1-Acetyl-4-piperidinyl)-2-[1-ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3-oxazole-4-carboxamide,
2-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-(tetrahydro-2H-pyran-4-yl)-1,3-oxazole-4-carboxamide,
2-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-(tetrahydro-2-furanylmethyl)-1,3-oxazole-4-carboxamide,
2-[1-Ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-[2-(4-methyl-1-piperazinyl)ethyl]-1,3-oxazole-4-carboxamide,
N-[1-(Aminomethyl)cyclohexyl]-2-[1-ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-N-methyl-1,3-oxazole-4-carboxamide,
N-(2,6-Dimethylphenyl)-2-[1-ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3-oxazole-4-carboxamide,
N-{[4-(Aminocarbonyl)phenyl]methyl}-2-[1-ethyl-4-(tetrahydro-2H-pyran-4-ylamino)-1H-pyrazolo[3,4-b]pyridin-5-yl]-1,3-oxazole-4-carboxamide,
2-{5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)acetamide,

5-{3-[2-(2,6-Dimethyl-4-morpholinyl)-2-oxoethyl]-1,2,4-oxadiazol-5-yl}-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-5-{3-[2-(4-methyl-1-piperidinyl)-2-oxoethyl]-1,2,4-oxadiazol-5-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
2-{5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}-*N*-[1-methyl-2-(methyloxy)ethyl]acetamide,
5-{3-[2-(3,5-Dimethyl-1-piperidinyl)-2-oxoethyl]-1,2,4-oxadiazol-5-yl}-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-5-{3-[2-(3-methyl-1-piperidinyl)-2-oxoethyl]-1,2,4-oxadiazol-5-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
2-{5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}-*N*-3-pyridinylacetamide,
6-{5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,3,4-oxadiazol-2-yl}-2-piperidinone,
1-Ethyl-5-{5-[(3-methyl-1*H*-1,2,4-triazol-5-yl)methyl]-1,3,4-oxadiazol-2-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
*N*-({5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}methyl)acetamide,
*N*-({5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}methyl)benzamide,
*N*-({5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}methyl)-2-phenylacetamide,
*N*-({5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}methyl)-2-methylpropanamide,
*N*-({5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}methyl)-3-methylbutanamide,
*N*-({5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}methyl)cyclohexanecarboxamide,
*N*-({5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}methyl)-2-furancarboxamide,
*N*-({5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}methyl)methanesulfonamide,
*N*-({5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}methyl)benzenesulfonamide,
*N*-({5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}methyl)-1-phenylmethanesulfonamide,
*N*-({5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}methyl)-2-propanesulfonamide,
*N*-({5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}methyl)-1-propanesulfonamide,
*N*-({5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}methyl)cyclopropanesulfonamide,

*N*-({5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}methyl)-2-thiophenesulfonamide,
1-({5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}methyl)-2-pyrrolidinone,
1-({5-[1-Ethyl-4-(tetrahydro-2*H*-pyran-4-ylamino)-1*H*-pyrazolo[3,4-*b*]pyridin-5-yl]-1,2,4-oxadiazol-3-yl}methyl)-2-piperidinone,
5-{3-[(1-Acetyl-4-piperidinyl)methyl]-1,2,4-oxadiazol-5-yl}-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-5-(3-{[1-(3-methylbutanoyl)-4-piperidinyl]methyl}-1,2,4-oxadiazol-5-yl)-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-5-(3-{[1-(methylsulfonyl)-4-piperidinyl]methyl}-1,2,4-oxadiazol-5-yl)-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-5-{3-[1-(phenylsulfonyl)cyclopropyl]-1,2,4-oxadiazol-5-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-5-[3-(phenylmethyl)-1,2,4-oxadiazol-5-yl]-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-5-[3-(1-phenylethyl)-1,2,4-oxadiazol-5-yl]-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-5-(3-{[4-(methyloxy)phenyl]methyl}-1,2,4-oxadiazol-5-yl)-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
5-(3-{[4-(Dimethylamino)phenyl]methyl}-1,2,4-oxadiazol-5-yl)-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
5-(3-{[3-(Dimethylamino)phenyl]methyl}-1,2,4-oxadiazol-5-yl)-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
5-(3-{[4-(Dimethylamino)phenyl]methyl}-1,2,4-oxadiazol-5-yl)-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-5-{3-[(phenyloxy)methyl]-1,2,4-oxadiazol-5-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-5-[3-(5,6,7,8-tetrahydro[1,2,4]triazolo[4,3-*a*]pyridin-3-ylmethyl)-1,2,4-oxadiazol-5-yl]-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-5-{3-[(4-phenyl-1-piperazinyl)methyl]-1,2,4-oxadiazol-5-yl}-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-5-(5-ethyl-1,2,4-oxadiazol-3-yl)-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
5-(5-{[4-(Dimethylamino)phenyl]methyl}-1,2,4-oxadiazol-3-yl)-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine,
1-Ethyl-5-(5-{[4-(methyloxy)phenyl]methyl}-1,2,4-oxadiazol-3-yl)-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine, or
5-(3,8-Dioxa-1-azaspiro[4.5]dec-1-en-2-yl)-1-ethyl-*N*-(tetrahydro-2*H*-pyran-4-yl)-1*H*-pyrazolo[3,4-*b*]pyridin-4-amine;

or a salt thereof.

43. A compound or salt as claimed in any of claims 1 to 38, which is:

1-Ethyl-5-(5-methyl-1,3,4-oxadiazol-2-yl)-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine (the compound of Example 14),
5-(5-Tert-butyl-1,3,4-oxadiazol-2-yl)-1-ethyl-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine (the compound of Example 17),
1-Ethyl-5-{5-[(methylsulfonyl)methyl]-1,3,4-oxadiazol-2-yl}-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine (the compound of Example 23),
1-Ethyl-5-[5-(3-methyloxetan-3-yl)-1,3,4-oxadiazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine (the compound of Example 34),
1-Ethyl-5-{5-[(4-methylpiperazin-1-yl)methyl]-1,3,4-oxadiazol-2-yl}-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine (the compound of Example 35),
1-Ethyl-N-(tetrahydro-2H-pyran-4-yl)-5-[5-(tetrahydro-2H-pyran-4-yl)-1,3,4-oxadiazol-2-yl]-1H-pyrazolo[3,4-b]pyridin-4-amine (the compound of Example 38),
also named: 1-Ethyl-5-[5-(morpholin-4-ylmethyl)-1,3,4-oxadiazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine (the compound of Example 39),
1-Ethyl-5-[5-(tetrahydrofuran-2-yl)-1,3,4-oxadiazol-2-yl]-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine (the compound of Example 44),
1-Ethyl-N-(tetrahydro-2H-pyran-4-yl)-5-[5-(tetrahydro-2H-pyran-4-ylmethyl)-1,3,4-oxadiazol-2-yl]-1H-pyrazolo[3,4-b]pyridin-4-amine (the compound of Example 77), or
1-Ethyl-5-{3-[2-oxo-2-(1-pyrrolidinyl)ethyl]-1,2,4-oxadiazol-5-yl}-N-(tetrahydro-2H-pyran-4-yl)-1H-pyrazolo[3,4-b]pyridin-4-amine (the compound of Example 84);

or a salt thereof.

44. A compound or salt as claimed any preceding claim, which is the compound or a pharmaceutically acceptable salt thereof.

45. A compound or salt as claimed in any preceding claim, which is in a particle-size-reduced form.

46. A compound or salt as claimed in claim 45, wherein the particle size (D50 value) of the size-reduced compound or salt is about 0.5 to about 10 microns.

47. A compound or salt as claimed in any preceding claim, for use as an active therapeutic substance in a mammal such as a human.

48. A pharmaceutical composition comprising a compound of formula (I) or (IA), as defined in any of claims 1 to 46, or a pharmaceutically acceptable salt thereof, and one or more pharmaceutically acceptable carriers and/or excipients.

49. A pharmaceutical composition as claimed in claim 48 which is suitable for and/or adapted for inhaled administration.

50. A pharmaceutical composition as claimed in claim 48 which is suitable for and/or adapted for oral administration.

51. A pharmaceutical composition as claimed in claim 48, 49 or 50, for the treatment and/or prophylaxis of an inflammatory and/or allergic disease or cognitive impairment in a mammal such as a human.

52. The use of a compound of formula (I) or (IA), as defined in any of claims 1 to 46, or a pharmaceutically acceptable salt thereof, in the manufacture of a medicament for the treatment and/or prophylaxis of an inflammatory and/or allergic disease or cognitive impairment in a mammal such as a human.

53. A method of treatment and/or prophylaxis of an inflammatory and/or allergic disease or cognitive impairment in a mammal such as a human in need thereof, which method comprises administering to the mammal a therapeutically effective amount of a compound of formula (I) or (IA), as defined in any of claims 1 to 46, or a pharmaceutically acceptable salt thereof.

54. A composition, or the use or a method as claimed in claim 51, 52 or 53, wherein the composition or medicament or method is for the treatment and/or prophylaxis of chronic obstructive pulmonary disease (COPD), asthma, rheumatoid arthritis or allergic rhinitis in a mammal such as a human.

55. A composition, the use or a method as claimed in claim 54, wherein the composition or medicament or method is for the treatment and/or prophylaxis of chronic obstructive pulmonary disease (COPD) in a mammal such as a human.

56. A composition, the use or a method as claimed in claim 54, wherein the composition or medicament or method is for the treatment and/or prophylaxis of asthma in a mammal such as a human.

57. A composition, the use or a method as claimed in any of claims 51 to 56, wherein the composition or medicament is for oral administration and is a pharmaceutical composition as defined in claim 50, or wherein the method comprises oral administration to the mammal of a pharmaceutical composition suitable for oral administration and as defined in claim 50.